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STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
LOS ANGELES REGION
101 CENTRE PLAZA DRIVE
MONTEREY PARK, CALIFORNIA 91754-2156
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GEORGE DEUKMEJIAN, Governor

April 9, 1990

Mr. Charles W. Carry
Chief Engineer and General Manager
County Sanitation Districts
of Los Angeles County
P.O. Box 4998
Whittier, CA 90607-4998

WASTE DISCHARGE REQUIREMENTS - PUENTE HILLS LANDFILL (FILE 57-220)
(CI 2294)

Reference is made to our letter dated March 8, 1990, which transmitted a copy of the revised tentative Waste Discharge Requirements for the subject landfill located in unincorporated Los Angeles County.

Pursuant to Section 13263 of the California Water Code, this California Regional Water Quality Control Board, at a public meeting held on March 26, 1990, reviewed the revised tentative Order, considered all factors in the case, and adopted Order No. 90-046 (copy attached) relative to this discharge.

If you have any questions, please call Mercedes A. Murillo at (213) 266-7549.

MICHAEL E. TAWEEL
Senior Engineering Geologist

cc: See attached mailing list

Enclosure

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STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. 90-046

WASTE DISCHARGE REQUIREMENTS
for
COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
(PUENTE HILLS LANDFILL)
(File No. 57-220)

The California Regional Water Quality Control Board, Los Angeles Region finds:

1. The County Sanitation Districts of Los Angeles County (CSDLAC) own and operate the Puente Hills Landfill, a 1365-acre, Class III waste disposal facility located at 2800 Workman Mill Road, in an unincorporated area of Los Angeles County, under waste discharge requirements adopted by this Regional Board in Order No. 89-32 adopted March 27, 1989. The landfill, formerly known as the San Gabriel Valley Dump, was a privately operated Class II facility until June 1, 1970, when CSDLAC purchased 1214 acres of the Pelissier Ranch, including the dump containing 6 million tons of refuse. On August 21, 1980, CSDLAC purchased 151 acres on the northern side of the site from the S.C. Operating Engineer (a trust), bringing the total permitted area to 1365 acres.

2. On January 31, 1958, Industrial Waste Permit No. 1918 was issued to the San Gabriel Valley Dump by the Los Angeles County Engineer, and approved by this Regional Board on April 10, 1958.

3. On April 23, 1959, this Regional Board adopted Resolution No. 59-34, prescribing waste discharge requirements for the disposal of nonhazardous solid and certain "semi-liquid" wastes, and inert wastes at the landfill. On July 27, 1972, this Regional Board adopted a "Monitoring and Reporting Program", thereby amending Resolution No. 59-34. On April 12, 1983, this Regional Board adopted "Monitoring and Reporting Program No. 2294", to include updated monitoring and reporting procedures,including dewatered sewage sludge sampling, analyses and reporting, again amending Resolution No. 59-34.

4. On November 1, 1983, the Los Angeles County Department of Regional Planning issued Conditional Use Permit Case No. 2235-(1) (CUP) to CSDLAC, in effect through October 31, 1993, which limits the placement of refuse to approximately 700 of the 1365 acres in accordance with a plot plan submitted by CSDLAC. Any expansion of the site beyond the fill limits of the plot plan shall require the issuance of new Waste Discharge Requirements. The estimated refuse capacity under this permit is approximately 21 million cubic tons as of February 1,1988, including daily, intermediate, and final cover material. An additional 170 million tons of unpermitted capacity exists at the site.

5. The current disposal area is underlain by 350 feet of solid waste fill material, reaching a surface elevation of 860 feet above mean sea level (MSL). Proposed landfilling will reach a maximum elevation of 1050 feet MSL and will slope down-canyon to the surrounding property.

6. The Puente Hills Landfill is located in National Flood Insurance Program Community No. 065-043-B. This area is classified as Zone C, designating the absence of flood hazard.

7. Land uses within one mile of the Puente Hills Landfill include residential areas to the north, east and southeast, and industrial manufacturing, commercial, wildlife sanctuary and recreational areas to the north and northwest. A college and associated agricultural areas are located to the west, and a large cemetery borders the south western boundary of the landfill. Undeveloped open space areas exist to the immediate south. The Pomona and San Gabriel River freeways intersect immediately northwest of the site.

8. A periodic waste load checking program has been implemented at the current disposal area and is proposed for all new areas of disposal operations at the site. This Program shall insure that unauthorized hazardous materials are not deposited at this site.

9. The landfill is, and will be operated as, a modified "cut and cover" side hill landfill. Soil, for use as cover, is excavated within the site property, or provided by reclaiming clean dirt loads from the incoming waste stream. Cover is designed and constructed to minimize infiltration of precipitation. Refuse is spread and compacted in cells approximately 18-20 feet in height. On the face of the landfill, soil is placed at a minimum thickness of 7 feet normal to the front face (15 feet on the horizontal). An approximately 15 foot wide bench is constructed approximately every 40 vertical feet to provide slope stability, drainage and access for maintenance. This design provides for proper grading and drainage of surface water to eliminate ponding of such water on the site. CSDLAC has proposed to the California Waste Management Board to use shredded greenwaste as an alternative daily cover material for use at the Puente Hills Landfill. From time to time, CSDLAC may evaluate the use of other materials as alternate cover material.

10. Portions of the site were formerly parts of the North Whittier Heights Oil Field,which was active from the early 1900's to 1970. All known abandoned oil and water wells on the landfill site have been properly decommissioned according to appropriate Division of Oil and Gas (DOG) guidelines. These wells were identified through a commissioned study titled Report of Geologic and Hydrogeologic Studies, Puente Hills Landfill Site, dated October 9, 1981 (LeRoy Crandall and Associates). Some improperly decommissioned wells may still exist for which no records exist. This Order specifies that upon discovery of any such wells, they will be properly decommissioned according to the appropriate DOG requirements.

11. A final Environmental Impact Report (EIR) was prepared by CSDLAC, dated January, 1983, in accordance with the California Environmental Quality Act (CEQA). The EIR determined that ground water quality in the Main San Gabriel aquifer was good at that time. Subsequent studies have determined that the quality of this aquifer has been adversely affected over time. Potential sources of contamination include residential, industrial, and manufacturing influences within the Main San Gabriel Valley Basin. The Basin is currently under a cooperative Superfund investigation being conducted by the Upper San Gabriel Municipal Water District, the Environmental Protection Agency, the State and Regional Boards, and others.

12. CSDLAC filed an ROWD for the disposal to land of nonhazardous solid and liquid waste, and inert solid wastes at the Puente Hills Landfill, in accordance with Article 9 of Subchapter 15. CSDLAC proposed in the ROWD to open operations in an adjacent canyon, known as Canyon 9, which is approved under the existing Conditional Use Permit. Supplemental technical reports include detailed plans and equipment specifications for compliance with Article 5 of Subchapter 15 (October 5, 1987), the "Puente Hills Canyon

9 Subsurface Barrier System" report (April 15, 1988), the "Subchapter 15 Article 5 Compliance for the Puente Hills Landfill" report (April 15, 1988), and the "Supplemental Geologic, Hydrologic and Engineering Site Factors at the Puente Hills Landfill" report (February, 1989). This Order specifies that final design and construction methods for proposed engineered systems be reviewed and approved by this Regional Board prior to installation and use.

13. Natural, unlined site conditions at the current area of operations (west of the Whittier Heights fault), meet the alternative construction criteria and guidelines of the State Water Resources Control Board for classification as a Class III disposal site, to receive selected non-hazardous solid wastes, dewatered sewage sludge and inert wastes. The qualifying natural features of this area include large thicknesses of steeply-dipping, low-permeability (10^{-6} cm/sec) bedrock both underneath and far downgradient of the refuse, and dendritic deposits of alluvium which act as a leachate collection system. The engineered features of the area include leachate extraction wells, vadose zone monitoring systems, subsurface barriers, and groundwater monitoring systems as described in the ROWD.

14. The Canyon 9 area, when lined, will meet the alternative construction criteria and guidelines of the State Water Resources Control Board for classification as a Class III disposal site, to receive selected non-hazardous solid wastes, dewatered sewage sludge and inert wastes. The proposed designs and features of this area include subdrain systems, liner systems, leachate collection and removal systems (LCRS), vadose zone monitoring systems, subsurface barriers, and groundwater monitoring systems as described in the ROWD.

15. Untreated incinerator ash from the Commerce Refuse-To-Energy Facility (CREA) and Southeast Resource Recovery Facility (SERRF), located in Long Beach is currently being disposed of at the Puente Hills Landfill. The volume of ash received in the past has averaged less than one percent of daily volume by weight of the refuse received, but is expected to rise to approximately six percent in the near future. The ash from both facilities has been classified as "nonhazardous" by the DHS; however,the continued disposal of this ash in an untreated form is not in conformance with applicable water quality objectives. This Order specifies that the Regional Board be notified at least 120 days in advance of the anticipated disposal of ash from any other facility. A program of acceptance, dependent upon its classification as "nonhazardous" by the DHS and upon its conformance with applicable water quality objectives, will be established by the Regional Board at that time.

16. The Regional Board recognizes that to cease accepting the ash immediately upon adoption of this Order would force closure of the incinerators, which generate the ash on a daily basis.This could create potential increased air pollution due to increased hauling distances, and increased threat to water quality due to illegal disposal of that refuse no longer being incinerated. It is therefore the intention of this Board to allow the interim disposal of this untreated ash under provisions A-5, D-8 and H-3, below, until March 25, 1991, to allow time for CSDLAC to propose and implement new treatment procedures which will modify the ash to be in compliance with the provisions of Section A, below. Disposal of the ash will be discontinued immediately if it is reclassified by the DHS as a hazardous waste prior to March 25, 1991.

17. The deadline listed in Finding No. 16 is revised from a March 26, 1990 deadline. The original deadline was issued by this Board on March 27, 1989 upon the adoption of Order No. 89-32, prescribing revised waste discharge requirements for the Puente Hills Landfill. The new deadline is necessary due to regulatory delays encountered in obtaining CEQA documentation and air quality permits, over which the discharger has little control.

18. CSDLAC has installed a landfill gas recovery system (LGRS) at the landfill site. Gas is collected through extraction wells and rock-lined trenches, designed in accordance with Article 4 of Subchapter 15. The gas is combusted to destroy odor at the Puente Hills Energy Recovery from Gas (PERG) facility located on site and operated by CSDLAC. This facility generates and sells electricity from the combusted gas, and flares any excess gas. This facility disposes of process wastewater by discharging to the sewer under Industrial Waste Permit No. 11265.

19. CSDLAC has installed separate surface water collection and groundwater extraction systems at the downgradient boundaries of the landfill in order to improve the water quality downgradient of the Puente Hills Landfill. CSDLAC proposes that all removed canyon waters be passed through a sedimentation tank and then discharged to the sewer under Industrial Waste Permit No. 10524. This Order specifies that waste discharge requirements will be required for all disposal methods (such as use of extracted liquids for dust control or site irrigation, or disposal by spray irrigation) except discharge to the sewer.

20. CSDLAC has implemented three subsurface barrier systems at the landfill, using approved methods of excavation and installation. The systems include the aforementioned groundwater extraction systems, the barriers, and monitoring wells. The barriers include one compacted clay barrier and two cement bentonite (slurry trench) barriers, all having a design permeability of 1×10^{-6} cm/sec and minimum thicknesses of 12 inches.

21. Subchapter 15 requires a site operator to install a clay liner with a permeability of not more than 1×10^{-6} cm/sec when site characteristics alone are not adequate to ensure protection of the quality of ground water. CSDLAC has proposed liner systems under all future areas of operation, that are conceptually comprised of (from bottom to top) a subdrain, a one-foot thick clay liner of 1×10^{-6} cm/sec minimum permeability, a synthetic liner (80-mil, high density polyethylene), a one foot thick blanket LCRS layer with a minimum of 1 cm/sec permeability, and a protective layer of soil.

22. There are no known active faults within 200 feet of the Puente Hills Landfill site (in accordance with California Division of Mines and Geology Guidelines Nos. 37, 43 and 44). Active faults are defined as Holocene Epoch faults, meaning that they have shown surface movement in the last 11,000 years. The nearest active fault is 3.72 miles away. Known as the "Whittier Narrows Fault", it may have triggered the October 1, 1987 earthquake (Richter Magnitude 5.9). The Whittier-Elsinore Fault, 1.2 miles away, is potentially active. There are four inactive faults on or near the disposal site:the onsite Whittier Heights fault, and the nearby Workman Hill, Rowland, and Handorf faults. The Whittier Heights Fault shows evidence of most recent activity during late Quaternary time (3 million years ago).

23. A seismic stability investigation was performed for CSDLAC, dated April 14, 1988. The study predicted expected peak ground accelerations (PGAs) of .20g to .25g associated with maximum probable earthquakes (MPEs) within a 100 year return period. The study further predicts that the landfill slopes will remain stable during an MPE resulting either from a large earthquake occurring along the San Andreas Fault, or a moderate earthquake occurring closer to the landfill. These predictions are supported by the conditions found at the disposal site after the October 1, 1987 event which subjected the landfill to a PGA of .25g. Subsequent inspection revealed no failures, settlement, or problems associated with the barrier or gas systems.

24. The disposal site is underlain by three Miocene bedrock formations (Puente, Pico and Repetto), and four Quaternary to Recent surficial deposits. The bedrock formations each average 1100 feet in thickness, and are classified by the Department of Water Resources (1961) as non-waterbearing. Canyon waters collect in weathered zones, however, creating low-permeability perched aquifers. These aquifers have very slow rates

of flow down the natural canyon gradients. The surficial units are thirty feet thick or less, and act as semi-perched aquifers for canyon waters, which percolate down-slope. Both aquifers are intercepted by barrier and extraction systems at the canyon mouths. Artificial engineered fill is present both as veneer and massive fill deposits. They are not designed to be nor considered to be water-bearing.

25. The disposal site is not located within any hydrologic unit; however, surface waters, perched ground waters, and semi-perched canyon waters, if not collected by the onsite controls, would otherwise drain into the Main San Gabriel Hydrologic Subunit of the San Gabriel River Hydrologic Unit of southern California.
26. The Board adopted a revised Water Quality Control Plan for the Los Angeles Basin on November 27, 1978. The Plan contains water quality objectives for surface and ground waters of the Main San Gabriel Hydrologic Subarea. Beneficial water uses near the Puente Hills Landfill are provided for in the revised Water Quality Control Plan mentioned above. Existing beneficial uses include municipal, domestic and agricultural supply, industrial service and process supply, groundwater recharge, hydropower generation, water contact and non-contact recreations, warm and cold freshwater habitats and wildlife habitats. The requirements in this Order, as they are met, will be in conformance with the goals of the Water Quality Control Plan.

27. This Board has notified the discharger and interested agencies and persons of its intent to adopt waste discharge requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

The Board in a public meeting heard and considered all comments pertaining to the discharge and to the tentative requirements.

IT IS HEREBY ORDERED, that the County Sanitation Districts of Los Angeles County shall comply with the following at the Puente Hills Landfill:

A. Acceptable Materials

1. The Puente Hills Landfill is a Class III landfill.

2. Wastes disposed of at this site shall be limited to certain nonhazardous solid wastes,inert solid wastes, and dewatered sewage or water treatment sludge as described in Subsection 2523(c) of Subchapter 15.

3. Nonhazardous solid waste means all putrescible and nonputrescible solid, semi-solid and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes and other discarded solid and semi-solid wastes; provided that such wastes do not contain wastes which must be managed as hazardous wastes, or wastes which contain soluble pollutants in concentrations which exceed applicable water quality objectives, or could cause degradation of waters of the state (i.e., designated wastes). (Section 2523(a), Subchapter 15.)

4. Dewatered sewage or water treatment sludge may be discharged under the following conditions:

a. In areas where natural geologic characteristics and the consideration of all other factors listed in Subsection 2533(b) of Subchapter 15, will ensure no impairment of beneficial uses to groundwater, or in areas with approved LCRS and liner systems designed to prevent such impairment, the sludge contains at least 20 percent solids if primary sludge, or at least 15 percent solids if secondary sludge, mixtures of primary and secondary sludges, or water treatment sludge: and

b. In areas where natural geologic characteristics and overall site containment quality cannot be determined, and where no approved LCRS and liner systems exist, the sludge contains at least 50 percent solids whether primary or secondary sludge, mixtures of primary and secondary sludges, or water treatment sludge; and

c. A minimum solids to liquids ratio of 5:1 by weight shall be maintained to insure that the co disposal will not exceed the initial moisture-holding capacity of the nonhazardous solid waste.

5. Incinerator ash may be discharged for twelve months from the date of adoption of this Order, at volumes no greater than six percent by weight (based on a weekly average), and provided that the ash is disposed of in accordance with Provision D-8, below. No ash may be disposed of beyond this date unless CSDLAC has demonstrated to the Board that the ash does not contain soluble pollutants at concentrations in excess of applicable Title 22 threshold limit concentrations for nonhazardous wastes, as well as applicable water quality objectives. The total threshold limit concentrations allowable for the ash will be determined based on the treatment process selected.

B. Unacceptable Materials

1. No hazardous wastes, designated wastes, or special wastes, such as liquids, oils, waxes, tars, soaps, solvents, or readily water-soluble solids, such as salts, borax, lye, caustic , or acids shall be disposed of at this site.

2. No semi-solid wastes shall be disposed of at this site, except as noted above. Semi-solid waste means waste containing less than 50 percent solids, as described in Subsection 2520(d)(3), Subchapter 15, other than dewatered sewage or water treatment sludge as described in Subsection 2523(c) of Subchapter 15, and Provision A-4, above.

3. No materials which are of a toxic nature, such as insecticides, poisons, or radioactive materials, shall be disposed of at this site.

4. No infectious materials or hospital or laboratory wastes, except those authorized for disposal to land by official agencies charged with control of plant, animal, and human disease, shall be disposed of at this site.

5. No pesticide containers shall be disposed of at this site, unless they are rendered nonhazardous by triple rinsing.

6. No septic tank or chemical toilet wastes shall be disposed of at this site.

7. The discharge of wastes or waste byproducts (i.e., leachate or gas condensate) to natural surface drainage courses or to ground water is prohibited.

C. Ground Water Protection Standards

1. In accordance with Subsection 2552 of Subchapter 15, the following water quality protection standards are established for this facility:

Parameter	Units	Maximum Value
Total dissolved solids	mg/L	5000
Sulfate	mg/L	3500
Chloride	mg/L	220
Boron	mg/L	2.0

2. Water quality protection standards maybe modified by the Regional Board based on more recent or complete groundwater monitoring data, changes in background water quality, or for any other valid reason.

3. The compliance point(s) where the water quality protection standards shall apply shall be along all downgradient edges of the disposal site.

4. The discharger shall use the statistical procedures contained in Subsection 2555(h) of Subchapter 15, to determine if there is a statistically significant increase for any indicator parameter. Upon approval of the Executive Officer, alternative statistical procedures may be used.

5. In the event a statistically significant increase is observed for any indicator parameter, the discharger shall establish a verification program in accordance with Subsection 2557(g) of Subchapter 15.

6. The discharger shall institute a corrective action monitoring program if representative analyses of the groundwater show a statistically significant increase in any water quality protection standard in accordance with Subsection 2557(8) of Subchapter 15.

7. The compliance period for which the water quality protection standards are applicable shall be the entire active life of the site and during the closure and post-closure maintenance periods.

D. Requirements for Disposal Site Operations

1. All State, County and City sanitary health codes, rules, regulations and ordinances pertinent to the disposal of wastes on land shall be complied with in the operation and maintenance of this disposal site.

2. There shall be no damage or nuisance to the community due to odors or unsightliness, which result from unreasonable practices in the disposal of wastes at this site, as defined in Section 13050(1) of the CWC.

3. The periodic load checking program shall continue to be implemented to prevent the disposal of hazardous wastes, designated wastes, or other unacceptable materials.

4. Neither the disposal nor handling of wastes at this site shall create pollution, as defined in Section 13050(1) of the CWC.

5. The discharger shall comply with notification procedures contained in Section 13271 of the CWC in regards to the discharge of hazardous substances. The discharger shall remove and relocate to a legal point of disposal, in accordance with County Health guidelines, any safely recoverable wastes which are discharged at this site in violation of these requirements. The Board shall be informed monthly in accordance with II-E of Monitoring and Reporting Program No. 2294 whenever relocation of wastes is necessary. The source and final disposition (and location) of the wastes, as well as methods undertaken to prevent future recurrences of such disposals shall also be reported. Those wastes which cannot be safely recovered shall be reported to the Board in writing within 7 days of the discharge.

6. Wastes deposited at this site shall be contained, and shall not be permitted to migrate off the site, or to enter offsite water drainage ditches or watercourses.

7. All wastes shall be adequately covered at the end of the operating day in accordance with Subsection 2544, Subchapter 15. Interim cover is daily cover and intermediate cover as defined by the California Waste Management Board. Interim cover over wastes discharged to this landfill shall be designed and constructed to minimize percolation of precipitation through wastes and contact with material deposited. To this end, ponding of liquids over deposited wastes is prohibited. Other measures shall be taken as needed, to prevent a condition of nuisance from fly breeding, rodent harborage, and other vector-related activities.

8. The disposal of all incinerator ash shall be handled in such a manner that it does not come in contact with other refuse or sludge, and its exposure to liquid infiltration of any kind shall be minimized. At the end of each working day, the ash shall be separately covered, and the general location of the ash disposal areas noted and submitted with each monthly report.

9. The migration of gases from the disposal site shall be controlled as necessary to prevent water pollution, nuisance or health hazards.

10. Gas condensate gathered from the gas monitoring and collection system at this disposal site shall not be returned to the site. Any proposed modifications or expansions to this system shall be designed to allow the collection, testing and treatment or disposal by approved methods of all gas condensate produced at the disposal site.

11. The discharger shall intercept, remove and dispose of any liquid detected in the LCRS at this disposal site to a legal point of disposal.

12. In any area within the disposal site where seepage water is observed, provisions shall be made and/or facilities shall be provided to insure that seep water will not come in contact with decomposable refuse in the disposal site. The locations of all springs and seeps found prior to, during, or after placement of waste material that could affect this disposal site shall be reported to the Board.

13. Drainage controls, structures, and facilities shall be designed to divert any precipitation or tributary runoff and prevent ponding and percolation of water at the site in compliance with Section 2546 of Subchapter 15, CAC. Temporary structures shall be installed as needed to comply with this requirement.

14. The disposal site shall be graded and maintained to promote runoff of precipitation and to prevent ponding of liquids and surface water. Erosion or washout of refuse or cover materials by surface flow shall be prevented.

15. No polluted surface waters shall leave this site except as permitted by a National Pollutant Discharge Elimination System (NPDES) permit issued in accordance with the Federal Clean Water Act and the California Code of Regulations (CCR).

16. Any abandoned wells or bore holes under the control of the site owner or operator and situated within site boundaries, must be located and properly modified or sealed to prevent mixing of any waters between adjacent water-bearing zones. A notice of intent to decommission a well must be filed with the appropriate regulatory agencies prior to decommissioning. Procedures used to decommission these wells, or to modify wells still in use, must conform to the specifications of the local health department or other applicable agencies.

17. The Regional Board shall be notified of any incident resulting from site operations that may endanger health or the environment by telephone within 24 hours and in writing within 7 days. The written notification shall fully describe the incident,including time of occurrence and duration of the incident, a description of the type of, time of, and duration of corrective measures, when correction will be complete (if the endangerment is continual), and the steps taken or planned to reduce or prevent recurrence.

E. Provisions for Onsite Use of Water

1. Except for potable water, any waters used for landscape irrigation, dust control or other non-emergency uses, shall be subject to waste discharge requirements.

2. All use of water shall be within the boundaries of the landfill property. During an emergency, this water may be used for fire fighting on the site or on undeveloped areas off and adjacent to the site.

3. No water shall be routinely applied to the disposal site except for landscape irrigation, road maintenance, or for surface dust control. Water used for these purposes shall only be applied by spraying, and shall be applied only on completed lifts, in quantities not to exceed those necessary to reduce immediate dust hazards or support plant life.

4. During periods of precipitation, when the use of extracted waste water is not necessary for the purposes specified in this Order, the waste water shall be stored or hauled to a legal point of disposal.

5. Washing of landfill equipment or vehicles shall be confined to areas where the waste water will not percolate into the disposal areas or native soil, or enter the storm water collection system, unless specifically permitted by waste discharge requirements.

6. Water used onsite shall at all times be within the range of 6.0 to 9.0 pH units, and shall not exceed the following limits:

Constituents	Unit	Maximum Limit
COD	mg/L	240
Oil and Grease	mg/L	15
BNA[1]	mg/L	0.1
Total Heavy Metals[2]	mg/L	1.5
Purgeable Organics[3]	ug/L	45.0

[1] BNA shall include the summation of concentrations of all base\neutral and acid extractable organic priority pollutant compounds.

[2] Total heavy metals shall include the combined concentrations of the following metals: arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver and zinc.

[3] Purgeable organic compounds shall include the summation of concentrations including purgeable priority pollutants, acetone and 2-butanone. No individual parameter may exceed 20 percent of the Maximum Limit.

7. Any water used on site shall not exceed the maximum contaminated levels contained in Title 22, Chapter 15, Article 4, Section 64435, CCR (or subsequent revisions), for heavy metals, nitrates and organic chemicals, and in Section 64473 for copper and zinc. Radioactivity shall not exceed the limits specified in Title 22, Chapter 15, Article 5, Sections 64441 and 64443, CCR (or subsequent revisions).

F. Provisions for Water Quality Monitoring

1. The discharger shall furnish, under penalty of perjury, technical or monitoring program reports in accordance with Section 13267 of the CWC. Failure or refusal to furnish these reports, or falsifying any information provided therein, renders the discharger guilty of a misdemeanor and subject to the penalties stated in Section 13268 of the CWC. Monitoring reports shall be submitted in accordance with the specifications contained in the "Monitoring and Reporting Program" prepared by the Executive Officer. This Monitoring and Reporting Program Is subject to periodic revisions as warranted.

2. The effectiveness of all monitoring wells, monitoring devices, and leachate and gas collection systems shall be maintained for the active life of this site and during the closure and post-closure maintenance periods. If any of these wells and/or monitoring devices are damaged, destroyed or abandoned for any reason,the discharger shall provide substitutes to meet the monitoring requirements of this Order.

3. The discharger shall insure that all of the monitoring wells and/or piezometers are in proper operating order at all times. The discharger shall have a "Monitoring Well Preventative Maintenance Program" approved by the Executive Officer. Elements of the program should include, a minimum of periodic visual inspections of the well integrity, pump removal and inspection, etc., plus appropriate inspection frequencies. If a well or piezometer is found to be inoperative, the Regional Board and other interested agencies shall be so informed in writing within 7 days after such discovery, and this notification shall contain a time schedule for returning the well or piezometer to operating order. The initial "Monitoring Well Preventative

Maintenance Program" will be due to the Board within 60 days after the adoption of this Order. Changes to the program should be submitted for Executive Officer approval at least 30 days prior to implementing the change(s).

4. For any monitoring wells or piezometers installed in the future, the discharger shall submit technical reports for approval by the Executive Officer, prior to installation. These technical reports shall be submitted at least 90 days prior to the anticipated date of installation of the wells or piezometers. These reports shall be accompanied by:

a. Maps and cross sections showing the locations of the monitoring facilities: and

b. Drawings and data showing construction details of the monitoring facilities. These data shall include:

(i) casing and bore hole diameters:
(ii) casing materials (PVC, stainless steel, etc)
(iii) depth of each hole;
(iv) size and positions of perforations;
(v) method of joining casing sections together;
(vi) nature of filter material;
(vii) depth and composition of seals; and
(viii) method and length of time of well development.

If a well or piezometer is proposed to replace an inoperative well or piezometer identified in the "Well Preventative Maintenance Program", the discharger shall not delay replacement while waiting for Executive Officer approval. However, the technical report shall be submitted within the required time schedule.

5. The discharger shall provide for the proper handling and disposal of water purged from the wells during sampling. Water pumped from the wells shall not be returned to that well (or any other well), unless appropriate waste discharge requirements have been prescribed, nor shall it be used for dust control or irrigation without waste discharge requirements.

6. Within 60 days of adoption of this Order, CSDLAC shall submit for review and Executive Officer approval, a work plan to develop and evaluate background water quality in the vicinity of the landfill. The workplan shall contain design specifications, proposed locations, and supporting rationale for monitoring wells in accordance with F-4, above, or alternative methods. The proposed monitoring wells will be used to obtain ground water samples representative of water quality equivalent to conditions anticipated to be naturally occurring at the downgradient boundaries of the landfill.

G. Provisions for Containment Structures

1. The site shall have containment structures which are capable of preventing degradation of the waters of the State. Construction standards for containment structures shall comply with Article4 of Subchapter 15. Any exceptions to these standards must fully meet the standards in Section 2510(b-c). Any deviation from these design specifications is subject to the Executive Officer's review and approval prior to any construction.

2. The discharger shall submit detailed preliminary and as-built plans, specifications, and descriptions for all future containment structures and monitoring systems for Executive Officer approval within 60 days after the adoption of this Order. The preliminary plans shall contain detailed quality assurance/quality control for the proposed construction. No disposal shall occur in a new area until the corresponding construction is completed and certified. The discharger shall also submit a description of and location data for ancillary facilities, including roads, waste handling areas, buildings, and equipment cleaning facilities. These plans and specifications shall be submitted within 30 days after completion of construction. If the preliminary plans and specifications and as-built plans are virtually identical, only change sheets need be submitted in lieu of complete as-built plans. Along with the change sheets or as-builts, the discharger shall submit a program, to be implemented upon request by the Executive Officer, which will provide for testing of any leachate collection and recovery systems to demonstrate their operating efficiency during the operating life of the facility, and during the closure and post-closure maintenance periods.

3. A legal description of the property boundaries of the disposal site shall be provided and permanent survey monuments shall be installed. The discharger shall also provide a scaled drawing of the site showing the legal description boundaries, the boundaries of the fill area, elevations of the disposal area, permanent monuments, structures and other significant features within 60 days of adoption of this Order.

4. Bench marks shall be established and maintained at the site in sufficient numbers to enable reference to key elevations and to permit control of critical grading and compaction operations.

H. Provisions for Reporting Scheduled Activities

1. The discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The operator shall also furnish to the Regional Board, upon request, copies of records required to be kept by this Order.

2. The Regional Board shall be notified in writing within 7 days if fluid is detected in a previously dry leachate detection system, an LCRS, or if a progressive increase in the liquid volume is detected in an LCRS.

3. CSDLAC, within 120 days of the adoption of this Order, shall submit a report to this Board proposing those options which will most expediently and most efficiently modify incinerator ash to be in conformance with all applicable Title 22 soluble threshold limit concentrations for nonhazardous wastes, as well as with applicable water quality objectives. Upon approval, modification of the ash can begin and shall be completed and approved no later than twelve months from the date of the adoption of this Order. The total threshold limit concentrations allowable for the ash will be determined based on the treatment process selected

4. The discharger within 60 days after adoption of this Order shall submit an "Operation Plan", to be approved by the Executive Officer, describing the landfill operation which shall include:

a. Contingency plans for the failure or breakdown of waste handling facilities which could have any potential water quality effects, including notice of any such failure, or any detection

of waste or leachate in monitoring facilities, to the Regional Board, appropriate local governments, and water users downgradient of the landfill.

b. A description of inspection and maintenance programs which will be undertaken regularly during disposal operations, the closure, and the post-closure maintenance period of facilities or equipment which could have any potential water quality effects.

5. The discharger shall notify the Regional Board of changes in information submitted in the ROWD and supplementary information, including any material change in the types, quantities, or concentrations of wastes discharged; or site operations and features. The discharger shall notify the Regional Board at least 120 days before any material change is made.

6. The discharger shall notify the Regional Board in writing of any proposed change of ownership or responsibility for construction, operation, closure, or post-closure maintenance of this facility. This notification shall be given prior to the effective date of the change and shall include a statement by the new discharger that construction, operation, closure, and post-closure maintenance will be in compliance with any existing waste discharge requirements and any revisions thereof.

7. The discharger shall comply with the closure notification requirements contained in Section 2590(c)(5) of Subchapter 15. As noted in that Section, closure must be in accordance with an "approved closure plan."

8. The discharger shall submit final closure and post-closure maintenance plans to the Board at least 240 days prior to closure (unless this requirement is less stringent than laws or regulations adopted regarding Closure and Post Closure plans adopted for other regulatory agencies).

9. The owner or operator of this facility shall notify the Regional Board in writing at least 180 days prior to the beginning of final closure activities. The notice shall include a statement that all closure activities will conform to the most recently approved closure plan and that the plan provides for site closure in compliance with all applicable federal and state regulations. In the event closure and post-closure maintenance plans have not been submitted for this disposal site, they shall accompany this notice.

10. The discharger shall submit a plan to be approved by the Executive Officer, within 60 days after adoption of this Order, demonstrating compliance with Subsection 2580(f) of Subchapter 15, which requires that the discharger provide for funding to insure that closure and post-closure maintenance activities are properly performed (unless this requirement is less stringent than laws or regulations adopted regarding closure and post-closure plans adopted for other regulatory agencies).

11. The owner or operator of this disposal site shall notify the Regional Board in writing at least 180 days prior to the beginning of final closure activities. The notice shall include a statement that all closure activities will conform to the most recently approved closure plan and that the plan provides for site closure in compliance with all applicable federal and state regulations. In the event closure and post-closure maintenance plans have not been submitted for this disposal site, they shall accompany this notice.

12. The owner or operator shall notify the Regional Board within 30 days after the completion of final closure activities that closure has been completed. The discharger shall certify under penalty of perjury that all closure activities were performed in accordance with the most recently approved closure plan and in accordance with all applicable regulations. The discharger shall certify that all closed disposal sites shall be maintained in accordance with approved post-closure maintenance plan(s).

I. General Provisions

1. CSDLAC shall comply with all other applicable provisions, requirements, and procedures contained in the most recent revision of the CAC, Title 23, Chapter 3, Subchapter 15, "Discharges of Waste to Land", and any amendments thereto.

2. Regional Board staff shall be allowed entry to the landfill, or where records are kept regarding the landfill, at any reasonable time. Staff shall be permitted to inspect any area of the landfill and any monitoring equipment used to demonstrate compliance with this Order. Staff shall be permitted to copy any records, photograph any area, obtain samples, and/or monitor operations to assure compliance with this Order, or as authorized by applicable laws or regulations.

3. The discharger shall maintain a copy of this Order at the site so as to be available at all times to site operating personnel.

4. This Board considers the property owner(s) to have a continuing responsibility for correcting any problems which may arise in the future as a result of this waste discharge and from gases and leachate that may be caused by infiltration or precipitation of drainage waters into the waste disposal areas or by infiltration of water applied to this property during subsequent use of the land for other purposes.

5. These requirements do not exempt the operator of this waste disposal site from compliance with any other current or future law which may be applicable. The requirements are not a permit; they do not legalize his waste disposal site, and they leave unaffected any further restraints on the disposal of wastes at this site which may be contained in other statutes.

6. The requirements prescribed herein do not authorize the commission of any act causing injury to the property of another, nor protect the operators from their liabilities under federal, state or local laws.

7. The filing of a request by the operators for a modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any condition, provision, or requirement of this Order.

8. This Order does not convey any property rights of any sort, or any exclusive privilege.

9. The discharger must comply with all of the terms, requirements and conditions of this Order. Any violation of this Order constitutes a violation of the CWC, and is grounds for enforcement action, Order termination, Order revocation and reissuance, denial of an application for reissuance, or a combination thereof.

Mailing List - Puente Hills Waste Discharge Requirements

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Mr. Ahmad Hassan
Department of Water Resources
P.O. Box 6598
Los Angeles, CA 90055

10. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:

a. Violation of any term or condition contained in this Order;

b. Obtaining this Order by misrepresentation, or failure to disclose all relevant facts;

c. A change in any condition that required either a temporary or permanent reduction or elimination of the authorized waste discharge.

11. Order No. 89-32, adopted March 27, 1989, is hereby rescinded.

I, Robert P. Ghirelli, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on March 26, 1990.

Robert P. Ghirelli

ROBERT P. GHIRELLI, D.Env.
Executive Officer

The Hacienda Heights Homeowners'
P.O. Box 5235
Hacienda Heights, CA 91745